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ASIA EDITION

US FDA funds Australian research for better, affordable asthma inhalers

October 23, 2023 | News

In 2015, the overall estimated cost of asthma in Australia was approximately $28 billion



Australian researchers have been awarded $AU1 million ($687,000) from the US Food and Drug Administration (FDA) to develop improved testing methods for dry powder inhalers.

The project will enable the more effective development of inhalers, particularly generic inhaler devices, in the hope of increasing access to affordable inhalers for asthma sufferers in the US and worldwide.

The researchers, led by the University of Sydney's Associate Professor Agisilaos Kourmatzis, from the School of Aerospace, Mechanical and Mechatronic Engineering, and Professor Hak-Kim Chan, who leads the Advanced Drug Delivery Group at the Sydney Pharmacy School, are developing modern methods to assess the performance of asthma inhalers.

Dry powder inhalers are a tricky area to study because they deliver very complex dosages compared to medicines that are swallowed, like tablets.

The study aims to enhance in-vitro testing to help better understand what is really going on in these complex systems. The researchers will be using more sophisticated data to drive the development of computational models that can fill in the gaps that the researchers can't address in the lab and by developing new optical and laser-based techniques that can offer new insights into this problem.